## First Steering Committee meeting – Summary of Agricultural Working Group meetings

# James River and Its Tributaries - Water Quality Improvement Plan for Bacteria Impairments

1:00 PM, January 12, 2011

1408 Westover Hills Blvd. Richmond, 23225

## Meeting on November 16, 2010:

The attendees at the meeting received a factsheet that described the purpose of the agricultural working group. The group discussed various control measures to obtain required bacteria load reductions from agricultural lands. Group also discussed implementation outreach methods.

### Control measures:

- Control measures considered include Grazing land protection system, Livestock exclusion with riparian buffers, Conservation tillage, Improved pasture management, Loafing lot management, Manure incorporation, Vegetative buffers, Woodland buffer filter area and Restoration on erodible crop and pasturelands
- Not much dairy animals in Bernards Creek watershed
- Grazing land protection system costs ~\$25,000
- Land use data some discrepancies in forested/non-forested parcels
- Voluntary BMPs not currently credited for water quality benefits farmers implemented no-till,
  but BMPs database indicates as under tilling operations
- Retention pond BMP control measure difficult to implement

# Outreach methods:

- Educating farmers on various control measures and their water quality benefits
- SWCD has contacts with large farmers, not the small famers. Encouraging small farmers and/or land owners would help implementation process
- Outreach means door-to-door flyers, local newspapers, radio/television, farmers or county fairs, and any other local media available in a watershed

### Meeting on December 13, 2010:

Meeting was held to - review the pollutant reductions that implementation plan must meet;

Discuss preliminary estimates of control measures that would result in reductions in Agricultural bacterial loads (Almond, Bernards, Powhite and James River sub-watersheds); Document existing

efforts to address bacteria loads in Agricultural lands; and Identify additional/alternative measures to reduce bacteria loads from agricultural lands, as needed. Discussions are briefly summarized as below.

## Sub-watersheds and Control measures:

- Pollutant reductions required from agricultural lands same as provided in TMDL development document
- It would have been helpful for the attendees to have watershed maps with boundaries, water quality stations and few other details available at the meeting
- Riverine portion of James River was not included in TMDL document
- Bernards has only one beef cattle and no dairy plant. Table 2 shows different than actual data
  needs to be updated
- No beef cattle and dairy in Chesterfield, livestock number in handout table seem too high
- Livestock population data needs to be verified with SWCD and/or other sources
- Almond creek very low livestock number, may be field verified
- Suggested use of correct naming of various control measures in implementation plan
- 7% of total stream fencing requirement is considered to estimate fencing maintenance needs and costs
- Generally, out-of-total stream fencing systems, consider 90% or more for grazing land protection systems; and 10% or less for stream protection systems
- Fencing estimates of James River (riverine) indicated in handout includes de-listed portion or not?
- Manure incorporation (including manure broadcast and injection) costs ~\$70-\$80 per acre

#### Extent of control measures need to verify and/or difficult to implement:

- Agricultural BMPs already installed needs to verify, Monacan staff would work for Monacan SWCD (Goochland and Powhatan Counties)
- Grazing land protection needs to verify for Monacan SWCD
- Protective cover for specialty crops no acreage within Monacan SWCD
- Continuous no-till acreage too high, although no-till is implemented, but does not meet SL-15A requirements
- Not clear boundaries of James River (riverine) section
- Retention ponds not feasible, as could run into difficulties with permits from USACE for work in Waters of the US.